



simplifying Compliance



Typical Environmental Permits for the Construction and Operation of a Manufacturing Facility

Why are permits necessary?

Even the most basic human activities can impact the quality of the environment. When activities are conducted in a concentrated or repetitive manner, the potential for impacts becomes even more significant. Environmental permits are required by federal, state and sometimes local governments to ensure that business and construction can be completed without adversely impacting the public's health or the local environment.

About This Document

The Kentucky Department for Environmental Protection, located within the Energy and Environment Cabinet, implements programs that control air emissions, water discharges, water withdrawals, waste management and waste disposal. Many of these programs require that facilities and operators obtain permits or authorizations prior to engaging in these activities. The specific environmental regulations and permits that could apply to the construction and operation of a manufacturing facility vary depending on the specific location and activities of the facility.

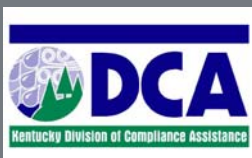
This document highlights the permits and authorizations, issued by the department, that typically pertain to a manufacturing facility. It does not cover every permit or authorization issued by the department. Individuals are encouraged to contact the Division of Compliance Assistance to ensure that they receive a comprehensive understanding of all of the permits or authorizations that may apply to their unique circumstances. This document is not a substitute for Kentucky's statutes and regulations governing the applicability and issuance of environmental permits.

Air Permits

A Division for Air Quality permit is required for the construction and operation of an air contaminant source and its air pollution control equipment. An "air contaminant or air pollutant" includes smoke, dust, soot, carbon or any particulate matter, radioactive matter, noxious acid, fumes, gases, odor, vapor or any combination of these items.



The time frame for review and issuance of an air quality permit, which covers both the construction and operation of the source, is dependent on the complexity of the source and the type of permit required. After a facility determines the volume of emissions that will occur at the facility, the air permitting matrix located on the following page can be used as a guide to identify the air permit that is applicable to the facility.



When can construction begin?

Some permits are required before construction can begin. If the appropriate permits are not obtained prior to beginning construction activities, the facility may be subject to costly fines and penalties, as well as likely delays.

AIR PERMITS

The owner of an air-contaminant source may conduct some activities prior to receiving an air permit. Allowable activities include planning, ordering equipment and materials, site clearing, grading and on-site storage of equipment and materials. All on-site activities of a permanent nature are prohibited until a permit is received. Prohibited on-site activities prior to issuance of an air permit include installation of building supports and foundations, paving and laying of underground pipe work.

WATER PERMITS

Prior to disturbing ground or beginning construction, the facility must obtain the following permits if they are applicable to its situation: stormwater construction permit, floodplains construction, 401 certification (wetland) and wastewater construction (sanitary only).

Air Permitting Matrix

If the facility has the potential to emit...

...the following permit is required.

Less than 10 tons/year of a regulated air pollutant, less than 2 tons/year of a hazardous air pollutant, and less than 5 tons/year of combined hazardous air pollutants

Neither a permit nor registration is required unless the facility is a new source that will be engaged in construction activities or if federal requirements apply to the source. In this case, a Minor Source Registration Form (DEP 7039A) must be submitted prior to construction.

More than 10 tons/year but less than 25 tons/year of a regulated air pollutant, more than 2 tons/year but less than 10 tons/year of a hazardous air pollutant, or more than 5 tons/year but less than 25 tons/year of combined hazardous air pollutants

The facility is required to register with the agency by submitting simplified form DEP 7039 prior to construction.

More than 25 tons/year but less than 100 tons/year of a regulated air pollutant and less than 10 tons/year of a hazardous air pollutant or less than 25 tons/year of combined hazardous air pollutants

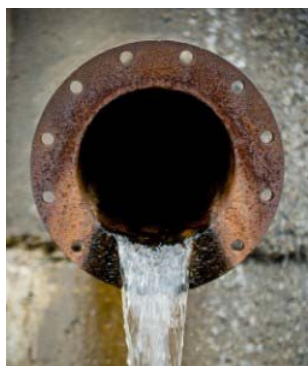
The facility is required to obtain a minor source permit prior to construction.

More than 100 tons/year of a regulated air pollutant, more than 10 tons/year of a hazardous air pollutant, or more than 25 tons/year of combined hazardous air pollutants

The facility is required to obtain a major source permit prior to construction. If the source will emit over 250 tons/year or will emit 100 tons/year or more and is defined as a major source in 401 KAR 51:001, the applicant will also be required to conduct a Prevention of Significant Deterioration (PSD) review. This includes the submission of up to a year of on-site ambient monitoring data prior to submittal. Some sources may be eligible to accept limitations on their potential to emit in order to avoid major source status (conditional major) or PSD status (synthetic minor).

Water Permits

The Division of Water regulates a variety of activities that can result in impacts to Kentucky's water resources. This includes wastewater discharges, construction, stormwater controls, water withdrawal and stream and wetland mitigation. Permits and authorizations that will typically be required of a manufacturing facility may include the following:



Wastewater Discharges—If wastewater is discharged into a municipal system, the company may need to meet pretreatment limits set by the local authority accepting the wastewater and obtain approvals or permits from that authority prior to discharging. If the facility will be discharging directly

into a water body in the state, a permit would be required for the discharge of wastewater from the point source (KPDES permit). A wastewater construction permit is also needed for sanitary treatment facilities. Facilities that wish to install a septic system will need to work with the local health department to get the septic system approved.

Stormwater Discharges—The state stormwater permitting guidelines are similar to the federal guidelines. At least two days prior to construction on a site that will disturb one or more acres, a Notice of Intent form must be submitted to the Division of Water. Certain industrial facilities, identified by the Standard Industrial Classification (SIC) codes, are required to submit an application for a stormwater permit prior to operation. Many new facilities are eligible for a general permit. However, a general permit is not applicable if the stormwater is also process water, and in certain circumstances, to protect water quality. Facilities that are required to obtain an individual Kentucky Pollutant Discharge Elimination System permit (KPDES permit) should include stormwater as part of the KPDES permit rather than obtain a general permit. If a facility is located within a political boundary that has a

Municipal Separate Storm Sewer System (MS4), there may be additional requirements per local ordinances. The MS4 operator should be contacted in order to verify any local requirements.

Groundwater Protection—A groundwater protection plan must be maintained at the facility if the facility handles pesticides, hazardous or solid wastes, bulk quantities of raw material and other potentially polluting substances. General groundwater protection plans are available for some types of facilities.

Floodplain and Wetlands—A Division of Water Floodplain Construction Permit is required prior to the construction, reconstruction and relocation or improvement of any dam, embankment, levee, dike, bridge, fill or other obstruction across or along any stream or in the floodway of any stream. A permit is also required to fill any area with earth, debris or any other material; raise the level of any area in a manner; place a building, barrier or obstruction of any sort on any area located adjacent to a river or stream; or in the floodway of the stream, so that such filling, raising or obstruction would in any way affect the flow of water in the channel or in the floodway of the stream. The application for a floodplain construction permit should be

submitted at least 20 days prior to the start of construction. Also, if the facility will disturb at least 200 feet of stream or impact a wetland, additional water quality certifications and permits must be obtained prior to construction. These applications must be submitted 30 days prior to construction.

Water Withdrawals—If raw water, at a rate of 10,000 gallons per day or more, is to be withdrawn from surface water or groundwater, a withdrawal permit must be obtained. If a well is to be drilled, a Kentucky-certified water well driller must be used. However, there are no permitting requirements to drill a well.

Drinking Water—A manufacturing facility does not need to obtain a drinking water authorization from the Division of Water unless it treats its own water and meets the definition of a public water system. However, prior to beginning construction, a facility should ensure that its anticipated drinking water source has adequate capacity and infrastructure available to deliver sufficient water to the facility. If it does not, the facility may need to work with the public water system and the Division of Water to ensure that drinking water service can be made available.

How long does it take to be issued a permit?

The amount of time it takes for the agency to issue a permit varies based on the complexity of the project, type of permit required and workload facing the agency. The following permit review time lines are reasonable guides for planning when your permit will be issued. This list is not inclusive of all permits issued by the department. All time lines are from the date an application is received by the department and does not include the time an applicant takes to respond to a notice of deficiency.

AIR PERMITS

Minor Permit—120 days
Major Permit—255 days
Major PSD Permit—255 days
Conditional Major—210 days
Synthetic Minor—210 days

WATER PERMITS

KPDES Operating—180 days
Wastewater Construction—180 days
Individual Stormwater—180 days
Floodplain Construction—20 days
401 Certification—30 days
Water Withdrawal—90 days

HAZARDOUS WASTE PERMITS

Storage in Tanks and Containers—365 days
Storage and Treatment in Tanks and Containers—365 days
Incinerator—365 days
Land Disposal and Miscellaneous Treatment Units—365 days
Multiple categories—the above timeframes are additive

Expediting Your Permit

The department is sensitive to the compressed time lines that are associated with the startup or expansion of a business. The agency is committed to reviewing permit applications as rapidly as possible, while ensuring that all approvals are appropriate. Permit applicants can help the agency facilitate a timely and accurate review.



1. Talk to the agency about your desired time line. The more the agency understands your situation, the more effectively it can prioritize its work.

2. Make sure that all applications are complete and accurate before submission. Often, delays occur simply because the agency has not received the information needed to make a final decision.
3. Submit applications as soon as possible. The longer you wait to submit an application, the harder it is for the agency to accommodate your time constraints.
4. Work with the Division of Compliance Assistance. The division can help identify the permits applicable at your location and facilitate discussions with the agency's permit reviewers.

Additional DEP contact information

Department for Environmental Protection

502-564-2150
www.dep.ky.gov

Division for Air Quality

502-564-3999
www.air.ky.gov

Division of Water

502-564-3410
www.water.ky.gov

Division of Waste Management

502-564-6716
www.waste.ky.gov

Waste Permits

The Division of Waste Management implements programs that ensure the proper handling, storage and disposal of solid and hazardous wastes.



Solid and Special Wastes—All solid and special wastes must be disposed of at a site permitted by the Division of Waste Management if the disposal location is in the commonwealth of Kentucky. On-site composting, land farming or beneficial reuse of a solid waste require agency approval. Off-site disposal does not require a permit from the Division of Waste Management. To arrange off-site disposal, contact a commercial waste hauling company. The hauling company must have a solid waste transporter's permit, and the destination landfill must have a solid waste disposal permit.

Hazardous Waste—There are two types of hazardous waste generators that are required to

register with the Division of Waste Management. Small-quantity generators (SQGs) generate between 220 pounds and 2,200 pounds of non-acute hazardous waste or up to 2.2 pounds of acute hazardous waste per month. Large-quantity generators (LQGs) generate more than 2,200 pounds of acute hazardous waste or more than 2.2 pounds of acute hazardous waste per month. Without a storage permit, SQGs are allowed to accumulate hazardous wastes for 180 days while LQGs are limited to 90 days. Kentucky allows generators to treat hazardous waste on-site under certain conditions.

Any facility that treats, stores or disposes of hazardous waste must receive a permit issued by the Division of Waste Management. Hazardous waste permit holders may store hazardous waste in tanks or containers for more than 180 days.

There are various registration and annual fees, depending on the number of waste streams and annual hazardous waste reports are required as opposed to the U.S. EPA's biannual reports.

Underground Storage Tanks—All underground storage tanks must be registered with the Division of Waste Management within 30 days of beginning their use.

Compliance and Permitting Assistance

The Kentucky Department for Environmental Protection's Division of Compliance Assistance helps businesses, individuals and organizations comply with environmental requirements. Answers to permitting and regulatory questions can be obtained by contacting the division by phone or e-mail. In addition, division staff members are available to provide on-site assistance and training to address specialized needs. The Division of Compliance Assistance can be reached at:

Kentucky Division of Compliance Assistance
300 Fair Oaks Lane
Frankfort, KY 40601

Phone: 1-800-926-8111
E-mail: envhelp@ky.gov
Website: dca.ky.gov

